Observations on Market Volatility

Overview

Equity market volatility has increased sharply, with the S&P 500 index declining 4.1% on Monday, February 5. The VIX Index, a measure of implied equity market volatility, increased by 116%, the largest one-day percentage change in its history. Volatility has also increased in fixed income and currency markets, but the move has been modest relative to the rise in equity volatility.

Monday's decline in the S&P 500 was the largest one-day decline since August 2011. In contrast to the current environment, August 2011 was a volatile period during which the US credit rating was downgraded and corporate credit and European sovereign debt markets were in crisis.

Outlook

In our view, equity fundamentals remain attractive. Strong economic growth is driving higher earnings expectations: year-to-date, the consensus FY2018 earnings growth forecast for the S&P 500 index has been revised up by 4.4 percentage points, from 12.3% to 16.7%[1]. We believe US tax reform provides an additional tailwind for the corporate sector that is not fully reflected in valuations.

We believe the pullback in equities is both healthy and warranted. As discussed in our 2018 Investment Outlook, the US equity market was overdue for a modest correction and a rise in volatility.

Considering the strong fundamental backdrop, we believe the weakness in equities is a short-term correction driven primarily by technical factors, not the start of a long-term reversal of the bull market trend. Recent weakness is a case of volatility leading the market, rather than the market leading volatility.

Key catalysts for the rise in volatility include:

- **Rising interest rates**
  Strong economic growth and signs of improving wage growth have driven US interest rates higher and US interest rate volatility has increased as a result. The decline in equities began in higher-yielding, more rate-sensitive sectors of the market and later spilled over into the broader market.

- **Overstretched positioning in "short volatility" products**
  In an environment of historically low volatility across major markets, we believe positioning in retail products that allow investors to sell ("short") volatility became overstretched. Open interest in several of these products reached record highs last week. Rising interest rates and weakness in rate-sensitive sectors of the equity market appear to have triggered a reversal of this positioning, which became self-reinforcing as volatility increased and short volatility products were forced to buy more volatility. According to Bloomberg News, more than a dozen investment products tied to the VIX Index have halted trading as of Tuesday morning.

[1] Source: IBES via Datastream, as of Feb. 5, 2018

- **Market-maker hedging**
  Investors exiting short volatility products must buy volatility from market makers. As market makers sell volatility in a rising market, they may hedge their exposure by selling equities.

- **Systematic trading**
  Rising volatility can lead to systematic rebalancing, hedging and other trading strategies across a variety of investment products. Examples include “risk parity” strategies that tend to rebalance from equities into other asset classes as equity volatility increases, annuity products that tend to hedge exposure when volatility increases and momentum-oriented products that tend to exit positions when momentum shifts.

We believe the recent correction provides investment opportunities at more attractive valuations. As of Monday’s close, the S&P 500 forward price-to-earnings ratio had fallen to 17.3x—a meaningful decline from 18.5x on February 1, 2018—following the selloff over Friday and Monday[2].

What to Watch

We see several areas to watch when attempting to gauge the risk of a longer-term reversal in equities:

- **Interest rates**
  As discussed in our 2018 Investment Outlook, we believe equities provide an attractive risk premium over government bonds, which may serve as a cushion against raising interest rates. We believe US 10-year rates can rise to 3% or more without the need for a sustained sell-off in equities.

- **Inflation expectations**
  Inflation expectations will be a key factor in the outlook for longer-term interest rates. The US Federal Reserve (Fed) has been very successful at raising short-term interest rates while keeping expectations for longer-term rates stable. A shift in inflation expectations could be a catalyst for greater uncertainty about the path of Fed policy, creating the risk of a sharper rise in long-term interest rates.

- **Credit markets**
  Stress in corporate credit markets often precedes longer-term reversals in equities. However, there is no sign of stress in credit markets in the current environment, with spreads on corporate bonds near cycle lows.

[2] Source: IBES via Datastream, as of Feb. 5, 2018